DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011250 Address: 333 Burma Road **Date Inspected:** 20-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Chen Xi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 02

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 004901 to perform Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic Particle Test report for this date. The member is identified as Longitudinal Diaphragm. The weld tested is identified as follows:

(LD3022-001-038,066,079,051)

(LD3021-001-038,066,079,051)

(LD3019-001-038,056)

(LD3020-001-056,038)

This QA Inspector randomly observed the following work in progress:

OBG # CROSS BEAM CB15 (BAY 1)

This QA observed ZPMC qualified welding personnel identified as 067752 / 067665 perform Shielded Metal Arc Welding Process (SMAW) welding on weld joint CB202A-015-017. ZPMC Quality Control Personnel (QC)

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identified as Mr. Zhu Lin was present to monitor the welding process. The Welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2114-TC-U4b-FCM.

This QA observed ZPMC qualified welding personnel identified as 215397 perform Flux Cored Arc Welding Process (FCAW) welding on weld joint FB204-045-087. ZPMC Quality Control Personnel (QC) identified as Mr. Zhu Lin was present to monitor the welding process. The Welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as 216575 perform Flux Cored Arc Welding Process (FCAW) welding on weld joint FB204-047-087. ZPMC Quality Control Personnel (QC) identified as Mr. Zhu Lin was present to monitor the welding process. The Welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-B-U2-F.

OBG # BAY 03

This QA observed ZPMC qualified welding personnel identified as 206623 perform Flux Cored Arc Welding Process (FCAW) welding on weld joint CA3003-051,052. ZPMC Quality Control Personnel (QC) identified as Mr. Guo Yuan Ting was present to monitor the welding process. The Welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-TC-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 044830 perform Flux Cored Arc Welding Process (FCAW) welding on weld joint SEG 072D-001,006. ZPMC Quality Control Personnel (QC) identified as Mr. Guo Yuan Ting was present to monitor the welding process. The Welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-TC-U4b-F.

This QA observed ZPMC qualified welding personnel identified as 208035 perform Flux Cored Arc Welding Process (FCAW) welding on weld joint LD3008-001-020,021. ZPMC Quality Control Personnel (QC) identified as Mr. Guo Yuan Ting was present to monitor the welding process. The Welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

OBG # CROSS BEAM CB9 (BAY 6)

During in-process visual inspection of OBG Cross beam CB9 in Bay 6, This QA inspector observed that ZPMC Magnetic particle Testing (MT) technician identified as Mr. Huang Jing appears to have rejected two (2) transverse linear indications. The weld designation as identified on the material is CB202A-009-005, CB202A-009-011. See attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents

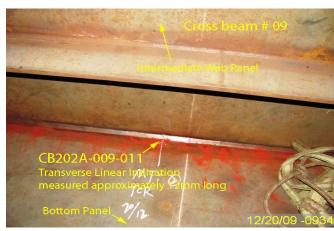
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Summary of Conversations:

As mention above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By:	Sukanthan, Dhanasingh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer